

## CLAIMS:

What is claimed is:

1. A wireless communication system that provides wireless service to a  
2 mobile unit operating on one of a first carrier frequency and a second carrier  
3 frequency within a service area, the first and second carrier frequencies being in  
4 the same or different bands, the wireless communication system comprising:

5 at least one base station controller, the at least one base station controller  
6 producing a capacity request in response to a request made by the mobile unit on  
7 an originating carrier frequency of the first and second carrier frequencies; a first  
8 plurality of base stations coupled to the at least one base station controller, the  
9 first plurality of base stations operating on a first carrier frequency, at least one  
10 candidate base station of the first plurality of base stations receiving the capacity  
11 request, determining its net excess capacity based upon available forward link  
12 resources and available reverse link resources, and responding with a net excess  
13 capacity response; a second plurality of base stations coupled to the at least one  
14 base station controller, the second plurality of base stations operating on a second  
15 carrier frequency, at least one candidate base station of the second plurality of  
16 base stations receiving the capacity request, determining its net excess capacity  
17 based upon available forward link resources and available reverse link resources,  
18 and responding with a net excess capacity response; and the at least one base  
19 station controller operating to assign the mobile unit by selecting at least one  
20 servicing base station from the candidate base stations based upon the received net  
21 excess capacity responses by selecting the originating carrier frequency despite a  
22 higher priority for the other of the first and second carrier frequencies whenever  
23 adequate capacity is indicated in the excess capacity responses for the originating  
24 carrier frequency to at least one responding candidate base station of the first  
25 plurality of base stations or to at least one responding candidate base station of the  
26 second plurality of base stations based upon received net excess capacity  
27 responses.

1       2. The wireless communication system of Claim 1 wherein inadequate  
2       capacity is indicated in the excess capacity responses for the originating carrier  
3       frequency, and further including:

4             the at least one base station controller selecting the other of the carrier  
5       frequencies than the originating carrier frequency.

1       3. The wireless communication system of Claim 2, wherein at least one of  
2       the frequencies other than the originating carrier frequency has an assigned high  
3       priority, and further including:

4             the at least one base station controller waiting a specified time period for a  
5       capacity estimate response for carrier frequencies of the assigned high priority;

6             when the capacity estimate response from at least one of the high priority  
7       carrier frequencies is positive, the at least one base station controller selecting a  
8       servicing base station from the candidate base stations based upon the received  
9       positive excess capacity responses for the at least one of the high priority carrier  
10      frequencies; and

11         the at least one base station controller servicing the mobile unit with the  
12      selected servicing base station on the at least one of the high priority carrier  
13      frequencies.

1       4. A wireless communication system that provides wireless service to a  
2       mobile unit operating within a service area, the wireless communication system  
3       comprising:

4             a plurality of base station controllers in at least partially overlapping  
5       sectors, at least one of the base station controllers producing a capacity request in  
6       response to a request made by the mobile unit; the plurality of base station  
7       controllers each having a first plurality of base stations coupled to them, the first  
8       plurality of base stations operating on a first carrier frequency, at least one  
9       candidate base station of the first plurality of base stations receiving the capacity  
10      request, determining its net excess capacity based upon available forward link  
11      resources and available reverse link resources, and responding with a net excess  
12      capacity response; the plurality of base station controllers each further having a  
13      second plurality of base stations coupled to them, the second plurality of base

14 stations operating on a second carrier frequency, the first and second carrier  
15 frequencies being in the same or different bands, at least one candidate base  
16 station of the second plurality of base stations receiving the capacity request,  
17 determining its net excess capacity based upon available forward link resources  
18 and available reverse link resources, and responding with a net excess capacity  
19 response; and the base station controllers operating to assign the mobile unit to a  
20 responding candidate base station of the plurality of base station controllers based  
21 upon received net excess capacity responses.

1 5. The wireless communication system of Claim 4, wherein at least one of the  
2 frequencies other than the originating carrier frequency has an assigned high  
3 priority, and further including:

4 the at least one base station controller waiting a specified time period for a  
5 capacity estimate response for carrier frequencies of the assigned high priority;

6 when the capacity estimate response from at least one of the high priority  
7 carrier frequencies is positive, the at least one base station controller selecting a  
8 servicing base station from the candidate base stations based upon the received  
9 positive excess capacity responses for the high priority carrier frequency; and the  
10 at least one base station controller servicing the mobile unit with the selected  
11 servicing base station on the high priority carrier frequency.

1 6. A wireless communication system that provides wireless service to a  
2 mobile unit operating within a service area, the wireless communication system  
3 comprising:

4 at least one base station controller, the at least one base station controller  
5 producing a capacity request in response to a request made by the mobile unit; a  
6 first plurality of base stations coupled to the at least one base station controller,  
7 the first plurality of base stations operating on a first carrier frequency, at least one  
8 candidate base station of the first plurality of base stations receiving the capacity  
9 request, determining its net excess capacity based upon available forward link  
10 resources and available reverse link resources, and responding with a net excess  
11 capacity response; a second plurality of base stations coupled to the at least one  
12 base station controller, the second plurality of base stations operating on a second

400944-001 10/23/2014

13 carrier frequency, the first and second carrier frequencies being in the same or  
14 different bands, at least one candidate base station of the second plurality of base  
15 stations receiving the capacity request, determining its net excess capacity based  
16 upon available forward link resources and available reverse link resources, and  
17 responding with a net excess capacity response;

18 at least one of the first and second carrier frequencies having an assigned  
19 high priority; and the at least one base station controller waiting a specified time  
20 period for a capacity estimate response for carrier frequencies of the assigned high  
21 priority and, when the capacity estimate response from the high priority carrier  
22 frequency is positive, operating to assign the mobile unit to at least one  
23 responding candidate base station of the first plurality of base stations or to at least  
24 one responding candidate base station of the second plurality of base stations  
25 based upon received net excess capacity response from the high priority carrier  
26 frequency.

1 7. The wireless communication system of Claim 6, wherein only one of the  
2 carrier frequencies has an assigned high priority, and wherein the at least one base  
3 station controller waits the specified time period for a capacity estimate response  
4 of the carrier frequency of the assigned high priority.

1 8. The wireless communication system of Claim 7, wherein no capacity  
2 response is received for the carrier frequency of the assigned high priority and the  
3 at least one base station controllers selecting a servicing base station based upon  
4 received positive excess capacity response for the other carrier frequency.

1 9. The wireless communication system of Claim 6, wherein a plurality of the  
2 carrier frequencies have an assigned high priority, and wherein the at least one  
3 base station controller waits the specified time period for a capacity response of  
4 each carrier frequency of the assigned high priority.

1 10. The wireless communication system of Claim 9, wherein no capacity  
2 response is received for the plurality of carrier frequencies with the assigned high  
3 priority, and wherein the at least one base station controller selects a servicing

FO22T-356mc007

- 4       base station from the candidate base stations based upon the highest received  
5       positive excess capacity response.

10034938-122701

1       11. A wireless communication system that provides wireless service to a  
2 mobile unit operating within a service area, the wireless communication system  
3 comprising:

4             a plurality of base station controllers in at least partially overlapping  
5 sectors, the base station controllers producing a capacity request in response to a  
6 request made by the mobile unit; at least one of the plurality of base station  
7 controllers having a first plurality of base stations coupled thereto, the first  
8 plurality of base stations operating on a first carrier frequency and a second carrier  
9 frequency, the first and second carrier frequencies being in the same or different  
10 bands, at least one candidate base station of the first plurality of base stations  
11 receiving the capacity request, determining its net excess capacity based upon  
12 available forward link resources and available reverse link resources, and  
13 responding with a net excess capacity response; at least one of the plurality of  
14 base station controllers having a second plurality of base stations coupled thereto,  
15 the second plurality of base stations operating only on one of the first and second  
16 carrier frequencies, at least one candidate base station of the second plurality of  
17 base stations receiving the capacity request, determining its net excess capacity  
18 based upon available forward link resources and available reverse link resources,  
19 and responding with a net excess capacity response; and the at least one base  
20 station controller operating if the excess capacity responses for the base stations in  
21 overlapping sectors indicate inadequate capacity on a first one of the first and  
22 second carrier frequencies to assign the mobile unit to at least one responding  
23 candidate base station of the first plurality of base stations on the other of the first  
24 and second carrier frequencies.

1       12. The wireless communication system of Claim 11, wherein at least one of  
2 the first and second frequencies has an assigned high priority, and further  
3 including:

4             the at least one base station controller waiting a specified time period for a  
5 capacity estimate response for carrier frequencies of the assigned high priority;

6             when the capacity estimate response from at least one of the carrier  
7 frequencies of the assigned high priority is positive, the at least one base station

8 controller selecting a servicing base station from the candidate base stations based  
9 upon the received positive excess capacity response for the high priority carrier  
10 frequency; and the at least one base station controller servicing the mobile unit  
11 with the selected servicing base station on the selected high priority carrier  
12 frequency.

1 13. In a wireless communication system including a first plurality of base  
2 stations that operate on a first carrier frequency and a second plurality of base  
3 stations that operate on a second carrier frequency, the first and second carrier  
4 frequencies being in the same or different bands, the first plurality of base stations  
5 and the second plurality of base stations providing overlaying service, a method of  
6 operation comprising:

7 receiving a request from a mobile unit on one of the first and second  
8 carrier frequencies as an originating carrier frequency; determining an operational  
9 position of the mobile unit based upon the location of a base station receiving the  
10 request; based upon the operational position of the mobile unit, requesting  
11 capacity information from candidate base stations of the first plurality of base  
12 stations and candidate base stations of the second plurality of base stations;  
13 receiving net excess capacity responses from the candidate base stations, each net  
14 excess capacity response based upon available forward link resources and  
15 available reverse link resources of a respective candidate base station; selecting at  
16 least one servicing base station from the candidate base stations based upon the  
17 received net excess capacity responses by selecting the originating carrier  
18 frequency despite a higher priority for the other of the first and second carrier  
19 frequencies whenever adequate capacity is indicated in the excess capacity  
20 responses for the originating carrier frequency; and servicing the mobile unit with  
21 the selected at least one servicing base station on the originating carrier frequency.

1 14. The method of Claim 13, wherein inadequate capacity is indicated in the  
2 excess capacity responses for the originating carrier frequency during the step of  
3 receiving net excess capacity responses, and wherein the step of selecting  
4 comprises the step of:

5                   selecting the other of the carrier frequencies than the originating carrier  
6                   frequency.

1       15. The method of Claim 14, wherein at least one of the frequencies other than  
2                   the originating carrier frequency has an assigned high priority, and further  
3                   including the steps of:

4                   waiting a specified time period for a capacity estimate response for carrier  
5                   frequencies of the assigned high priority;

6                   when the capacity estimate response from at least one of the high priority  
7                   carrier frequencies is positive, selecting a servicing base station from the  
8                   candidate base stations based upon the received positive excess capacity responses  
9                   for the at least one of the high priority carrier frequencies; and servicing the  
10                  mobile unit with the selected servicing base station on the at least one of the high  
11                  priority carrier frequencies.

1       16. In a wireless communication system including a plurality of base station  
2                  controllers in at least partially overlapping sectors, at least one of the plurality of  
3                  base station controllers having a first plurality of base stations that operate on a  
4                  first carrier frequency and a second plurality of base stations that operate on a  
5                  second carrier frequency, the first and second carrier frequencies being in the  
6                  same or different bands, the first plurality of base stations and the second plurality  
7                  of base stations providing overlaying service, a method of operation comprising:

8                   receiving a request from a mobile unit; determining an operational position  
9                  of the mobile unit based upon the location of a base station receiving the request;  
10                 based upon the operational position of the mobile unit, requesting capacity  
11                 information from candidate base stations of the first plurality of base stations and  
12                 candidate base stations of the second plurality of base stations for base station  
13                 controllers in sectors overlapping the location of the base station receiving the  
14                 request; receiving net excess capacity responses from the candidate base stations,  
15                 each net excess capacity response based upon available forward link resources and  
16                 available reverse link resources of a respective candidate base station;

17           when the candidate base station is associated with a cell in which the  
18           mobile station accessed the wireless communication system, retaining that  
19           candidate base station as one of the candidate base stations;

20           selecting at least one servicing base station from the retained candidate  
21           base stations of the base station controllers in overlapping sectors based upon the  
22           received net excess capacity responses, the at least one servicing base station  
23           corresponding to either the first carrier frequency or the second carrier frequency;  
24           and servicing the mobile unit with the selected base station.

1           17. The method of Claim 16, wherein at least one of the carrier frequencies  
2           has an assigned high priority, and further including the steps of:

3           waiting a specified time period for a capacity estimate response for carrier  
4           frequencies of the assigned high priority;

5           when the capacity estimate response from at least one of the high priority  
6           carrier frequencies is positive, selecting a servicing base station from the  
7           candidate base stations based upon the received positive excess capacity responses  
8           for the high priority carrier frequency; and servicing the mobile unit with the  
9           selected servicing base station on the high priority carrier frequency.

1           18. In a wireless communication system including a first plurality of base  
2           stations that operate on a first carrier frequency and a second plurality of base  
3           stations that operate on a second carrier frequency, the first and second carrier  
4           frequencies being in the same or different bands, the first plurality of base stations  
5           and the second plurality of base stations providing overlaying service, at least one  
6           of the frequencies for the base stations having an assigned high priority, a method  
7           of operation comprising:

8           receiving a request from a mobile unit; determining an operational position  
9           of the mobile unit based upon the location of a base station receiving the request;  
10           based upon the operational position of the mobile unit, requesting capacity  
11           information from candidate base stations of the first plurality of base stations and  
12           candidate base stations of the second plurality of base stations;

13           waiting a specified time period for a capacity estimate response for carrier  
14           frequencies of the assigned high priority; receiving net excess capacity responses

15 from the candidate base stations, each net excess capacity response based upon  
16 available forward link resources and available reverse link resources of a  
17 respective candidate base station;

18       when the capacity estimate response from the high priority carrier  
19 frequency is positive, selecting a servicing base station from the candidate base  
20 stations based upon the received positive excess capacity responses for the high  
21 priority carrier frequency; and servicing the mobile unit with the selected  
22 servicing base station on the high priority carrier frequency.

1       19. The method of Claim 18, wherein only one of the carrier frequencies has  
2 an assigned high priority, and wherein the step of waiting comprises:

3           waiting the specified time period for a capacity estimate response for the  
4 carrier frequency of the assigned high priority.

1       20. The method of Claim 19, wherein no capacity response is received from  
2 the carrier frequency with the high priority, and wherein the step of selecting  
3 comprises the step of:  
4           selecting a servicing base station from the candidate base stations based  
5 upon the received positive excess capacity responses for the next highest priority  
6 carrier frequency.

1       21. The method of Claim 18, wherein a plurality of the carrier frequencies  
2 have an assigned high priority, and wherein the step of waiting comprises:

3           waiting the specified time period for a capacity estimate response for each  
4 carrier frequency of the assigned high priority.

1       22. The method of Claim 21, wherein no capacity response is received from  
2 the plurality of carrier frequencies with the high priority, and wherein the step of  
3 selecting comprises the step of:  
4           selecting a servicing base station from the candidate base stations based  
5 upon the highest received positive excess capacity response.

FO4227-SEC64007

1       23. In a wireless communication system including a plurality of base station  
2       controllers in at least partially overlapping sectors, at least one of the plurality of  
3       base station controllers having a first plurality of base stations that operate on a  
4       first carrier frequency and a second plurality of base stations that operate on a  
5       second carrier frequency, the first and second carrier frequencies being in the  
6       same or different bands, the first plurality of base stations and the second plurality  
7       of base stations providing overlaying service, and at least one of the plurality of  
8       base station controllers having a base station that operates only on one of the first  
9       and second carrier frequencies, a method of operation comprising:

10      receiving a request from a mobile unit; determining an operational position  
11     of the mobile unit based upon the location of a base station receiving the request;  
12     based upon the operational position of the mobile unit, requesting capacity  
13     information from candidate base stations of the plurality of base station controllers  
14     in sectors overlapping the location of the base station receiving the request;  
15     receiving net excess capacity responses from the candidate base stations, each net  
16     excess capacity response based upon available forward link resources and  
17     available reverse link resources of a respective candidate base station; if the  
18     excess capacity responses for the base stations in overlapping sectors indicate  
19     inadequate capacity on a first one of the first and second carrier frequencies,  
20     selecting at least one servicing base station on the other of the first and second  
21     carrier frequencies from the candidate base stations of the base station controllers  
22     in overlapping sectors based upon the received net excess capacity responses; and  
23     servicing the mobile unit with the selected servicing base station.

1       24. The method of Claim 23, wherein at least one of the first and second  
2       frequencies has an assigned high priority, and further including the steps of:

3           waiting a specified time period for a capacity estimate response for carrier  
4           frequencies of the assigned high priority;

5           when the capacity estimate response from at least one of the carrier  
6           frequencies of the assigned high priority is positive, selecting a servicing base  
7           station from the candidate base stations based upon the received positive excess  
8           capacity response for the high priority carrier frequency; and servicing the mobile

9 unit with the selected servicing base station on the selected high priority carrier  
10 frequency.

1 25. A computer readable medium that is readable by at least one component of  
2 a wireless communication system that includes a first plurality of base stations  
3 that operate on a first carrier frequency and a second plurality of base stations that  
4 operate on a second carrier frequency and that supports a mobile unit, the first and  
5 second carrier frequencies being in the same or different bands, the first plurality  
6 of base stations and the second plurality of base stations providing overlaying  
7 service, the computer readable medium comprising:

8 a set of instructions that, when executed by the wireless communication  
9 system, cause the wireless communication system to perform the following  
10 operations: receive a request from a mobile unit on one of the first and second  
11 carrier frequencies as an originating carrier frequency; determine an operational  
12 position of the mobile unit based upon the location of a base station receiving the  
13 request; based upon the operational position of the mobile unit, request capacity  
14 information from candidate base stations of the first plurality of base stations and  
15 candidate base stations of the second plurality of base stations; receive net excess  
16 capacity responses from the candidate base stations, each net excess capacity  
17 response based upon available forward link resources and available reverse link  
18 resources for a respective candidate base station; select at least one servicing base  
19 station at the originating carrier frequency from the candidate base stations based  
20 upon the received net excess capacity responses, despite a higher priority for the  
21 other of the first and second carrier frequencies, whenever adequate capacity is  
22 indicated in the excess capacity responses for the originating carrier frequency;  
23 and service the mobile unit with the selected servicing base station on the  
24 originating carrier frequency.

1 26. The computer readable medium of Claim 25, wherein the set of  
2 instructions includes instructions that cause the wireless communication system  
3 to:

704237-83C649057

4           select the other of the carrier frequencies than the originating carrier  
5           frequency when inadequate capacity is indicated in the responses for the  
6           originating carrier frequency.

1       27. The computer readable medium of Claim 26, wherein at least one of the  
2           frequencies other than the originating carrier frequency has an assigned high  
3           priority, and wherein the set of instructions includes instructions that cause the  
4           wireless communication system to:

5           wait a specified time period for a capacity estimate response for carrier  
6           frequencies of the assigned high priority;

7           when the capacity estimate response from at least one of the high priority  
8           carrier frequencies is positive, select a servicing base station from the candidate  
9           base stations based upon the received positive excess capacity responses for the at  
10           least one of the high priority carrier frequencies; and service the mobile unit with  
11           the selected servicing base station on the at least one of the high priority carrier  
12           frequencies.

1       28. A computer readable medium that is readable by at least one component of  
2           a wireless communication system that includes a plurality of base station  
3           controllers in at least partially overlapping sectors, at least one of the plurality of  
4           base station controllers having a first plurality of base stations that operate on a  
5           first carrier frequency and a second plurality of base stations that operate on a  
6           second carrier frequency and that supports a mobile unit, the first and second  
7           carrier frequencies being in the same or different bands, the first plurality of base  
8           stations and the second plurality of base stations providing overlaying service, the  
9           computer readable medium comprising:

10           a set of instructions that, when executed by the wireless communication  
11           system, cause the wireless communication system to perform the following  
12           operations: receive a request from a mobile unit; determine an operational position  
13           of the mobile unit based upon the location of a base station receiving the request;  
14           based upon the operational position of the mobile unit, request capacity  
15           information from candidate base stations of the plurality of base station controllers  
16           and candidate base stations of the second plurality of base stations; receive net

17 excess capacity responses from the candidate base stations, each net excess  
18 capacity response based upon available forward link resources and available  
19 reverse link resources for a respective candidate base station; select at least one  
20 servicing base station from the candidate base stations of the base station  
21 controllers in overlapping sectors based upon the received net excess capacity  
22 responses, the at least one servicing base station corresponding to either the first  
23 carrier frequency or the second carrier frequency; and service the mobile unit with  
24 the selected servicing base station.

1        29. The computer readable medium of Claim 28, wherein at least one of the  
2        carrier frequencies has an assigned high priority, and wherein the set of  
3        instructions includes instructions that cause the wireless communication system  
4        to:

5              wait a specified time period for a capacity estimate response for carrier  
6        frequencies of the assigned high priority;

7              when the capacity estimate response from at least one of the high priority  
8        carrier frequencies is positive, select a servicing base station from the candidate  
9        base stations based upon the received positive excess capacity responses for the  
10      high priority carrier frequency; and service the mobile unit with the selected  
11      servicing base station on the high priority carrier frequency.

1        30. A computer readable medium that is readable by at least one component of  
2        a wireless communication system that includes a first plurality of base stations  
3        that operate on a first carrier frequency and a second plurality of base stations that  
4        operate on a second carrier frequency and that supports a mobile unit, the first and  
5        second carrier frequencies being in the same or different bands, the first plurality  
6        of base stations and the second plurality of base stations providing overlaying  
7        service, at least one of the base stations having an assigned high priority, the  
8        computer readable medium comprising:

9              a set of instructions that, when executed by the wireless communication  
10      system, cause the wireless communication system to perform the following  
11      operations: receive a request from a mobile unit; determine an operational position  
12      of the mobile unit based upon the location of a base station receiving the request;  
13      based upon the operational position of the mobile unit, request capacity  
14      information from candidate base stations of the first plurality of base stations and  
15      candidate base stations of the second plurality of base stations;

16              wait a specified time period for a capacity estimate response for carrier  
17        frequencies of the assigned high priority;

18              receive net excess capacity responses from the candidate base stations,  
19        each net excess capacity response based upon available forward link resources and  
20        available reverse link resources for a respective candidate base station; if the  
21        capacity estimate response from the highest priority carrier frequency is positive,

22 select a servicing base station from the candidate base stations based upon the  
23 positive net excess capacity responses for the highest priority carrier frequency;  
24 and service the mobile unit with the selected servicing base station on the highest  
25 priority carrier frequency.

1       31. The computer readable medium of Claim 30, wherein the set of  
2       instructions includes instructions that cause the wireless communication system  
3       to:

4 wait the specified time period for a capacity estimate response for the  
5 carrier frequency of the assigned high priority.

1       32. The computer readable medium of Claim 31, wherein the set of  
2       instructions includes instructions that cause the wireless communication system  
3       to:

4 select a servicing base station from the candidate base stations based upon  
5 the received positive excess capacity responses for the next highest priority carrier  
6 frequency.

1       33. The computer readable medium of Claim 30, wherein the set of  
2 instructions includes instructions that cause the wireless communication system  
3 to:

4 wait the specified time period for a capacity estimate response for each  
5 carrier frequency of the assigned high priority.

1       34. The computer readable medium of Claim 33, wherein the set of  
2 instructions includes instructions that cause the wireless communication system  
3 to:

select a servicing base station from the candidate base stations based upon  
the highest received positive excess capacity response.

1       35. A computer readable medium that is readable by at least one component of  
2           a wireless communication system that includes a plurality of base station  
3           controllers in at least partially overlapping sectors, at least one of the plurality of

4 base station controllers having a first plurality of base stations that operate on a  
5 first carrier frequency and a second plurality of base stations that operate on a  
6 second carrier frequency and that supports a mobile unit, the first and second  
7 carrier frequencies being in the same or different bands, the first plurality of base  
8 stations and the second plurality of base stations providing overlaying service, and  
9 at least one of the plurality of base station controllers having a base station that  
10 operates only on one of the first and second carrier frequencies, the computer  
11 readable medium comprising:

12 a set of instructions that, when executed by the wireless communication  
13 system, cause the wireless communication system to perform the following  
14 operations: receive a request from a mobile unit; determine an operational position  
15 of the mobile unit based upon the location of a base station receiving the request;  
16 based upon the operational position of the mobile unit, request capacity  
17 information from candidate base stations of the plurality of base station  
18 controllers; receive net excess capacity responses from the candidate base stations,  
19 each net excess capacity response based upon available forward link resources and  
20 available reverse link resources for a respective candidate base station; if the  
21 excess capacity responses for the base stations in overlapping sectors indicate  
22 inadequate capacity on a first one of the first and second carrier frequencies, select  
23 at least one servicing base station of the base station controllers in overlapping  
24 sectors on the other of the first and second carrier frequencies from the candidate  
25 base stations based upon the received net excess capacity responses, the at least  
26 one servicing base station corresponding to either the first carrier frequency or the  
27 second carrier frequency; and service the mobile unit with the at selected servicing  
28 base station.

1 36. The computer readable medium of Claim 35, wherein at least one of the  
2 carrier frequencies has an assigned high priority, and wherein the set of  
3 instructions includes instructions that cause the wireless communication system  
4 to:

5 wait a specified time period for a capacity estimate response for carrier  
6 frequencies of the assigned high priority;

10072217-955646001

7           when the capacity estimate response from at least one of the carrier  
8 frequencies of the assigned high priority is positive, select a servicing base station  
9 from the candidate base stations based upon the received positive excess capacity  
10 response for the high priority carrier frequency; and service the mobile unit with  
11 the selected servicing base station on the selected high priority carrier frequency.